[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0212; Project Identifier 2018-CE-032-AD]

RIN 2120-AA64

Airworthiness Directives; DG Flugzeugbau GmbH Gliders

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all DG Flugzeugbau GmbH Models DG-808C and DG-1000T gliders. This proposed AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as damaged fuel hoses due to environmental and fatigue deterioration. This proposed AD would require inspecting the polyurethane (PU) fuel hoses, replacing the PU fuel hoses if there is damage, and establishing a life limit for the PU fuel hoses. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact DG Flugzeugbau GmbH, Otto-Lilienthal Weg 2, D-76646 Bruchsal, Germany; phone: +49 (0)7251 3202-0; email: info@dg-flugzeugbau.de; website: https://www.dg-flugzeugbau.de/. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0212; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4165; fax: (816) 329-4090; email: jim.rutherford@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2021-0212; Project Identifier 2018-CE-032-AD" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0127, dated June 11, 2018 (referred to after this as "the MCAI"), to address an unsafe condition on DG Flugzeugbau GmbH Models DG-808C and DG-1000T gliders. The MCAI states:

> An occurrence was reported where, during accomplishment of a 10 years inspection on a DG-808C powered sailplane, a damaged (broken) PU [polyurethane] fuel hose was found. The result of subsequent investigation indicated that the damage mode has features of environmental and fatigue deterioration. Additionally, it was determined that similar PU fuel hoses are also installed on other powered sailplane types of the same manufacturer.
>
> This condition, if not detected and corrected, could lead to reduced or interrupted fuel supply to the engine, consequent loss of the available power or fire, possibly resulting in reduced control of the powered sailplane.
>
> To address this potential unsafe condition, DG-Flugzeugbau GmbH issued the applicable TN [Technical Note], providing instructions to inspect the affected parts and replace these with serviceable parts. Additionally, service life limits were established for those serviceable parts.

> For the reasons described above, this [EASA] AD requires repetitive inspections of the affected parts. This [EASA] AD also requires replacement of the affected parts with serviceable parts and introduces life limits for serviceable parts.

You may examine the MCAI in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0212.

Related Service Information under 1 CFR Part 51

The FAA reviewed DG Flugzeugbau GmbH Technical Note No. 800/46, Issue 01.a, dated March 7, 2018, for Model DG-808C gliders; and Technical Note No. 1000/38, Issue 01.a, dated February 15, 2018, for Model DG-1000T gliders. The service information, as applicable to the appropriate model glider, specifies inspections of the PU fuel hoses, replacement of the PU fuel hoses if damage is found during an inspection, and actions to take when the hoses have reached their life limit. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

FAA's Determination

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this NPRM after determining the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described, except as discussed under "Differences Between this Proposed AD and the MCAI."

Differences Between this Proposed AD and the MCAI

The MCAI requires replacing any damaged fuel hoses before next engine operation, while this proposed AD would require replacing damaged fuel hoses before further flight. Even though use of the engine is optional and the glider can operate without the engine, the glider has other electronic equipment installed that could cause arcing and result in an in-flight fire if there is a fuel leak.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 10 gliders of U.S. registry. The FAA also estimates that it would take about 2 work-hours per glider to comply with each inspection required by this proposed AD. The average labor rate is $85 per work-hour.

Based on these figures, the FAA estimates the inspection cost of this proposed AD on U.S. operators to be $1,700, or $170 per glider, each inspection cycle.

In addition, the FAA estimates that each replacement action required by this proposed AD would take about 8 work-hours and require parts costing $500. Based on these figures, the FAA estimates the replacement cost of this proposed AD on U.S. operators to be $1,180 per glider.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

DG Flugzeugbau GmbH: Docket No. FAA-2021-0212; Project Identifier 2018-CE-032-AD.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to DG Flugzeugbau GmbH Models DG-808C and DG-1000T gliders, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 2800, Aircraft Fuel System.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an

unsafe condition on an aviation product. The MCAI describes the unsafe condition as damaged polyurethane (PU) fuel hoses due to environmental and fatigue deterioration. The FAA is issuing this AD to prevent reduced or interrupted fuel supply to the engine or fuel leakage. The unsafe condition, if not addressed, could result in loss of engine power or in-flight fire.

(f) Definitions

(1) For purposes of this AD, an "affected part" is a PU fuel hose installed in an airframe fuel system or engine compartment that:

(i) Does not meet industrial standard DIN 73379-2A, or

(ii) Does not meet ISO 7840-A1 without metal shielding.

(2) For purposes of this AD, a "serviceable part" is a PU fuel hose installed in an airframe fuel system or engine compartment that:

(i) Meets industrial standard DIN 73379-2A, or

(ii) Meets industrial standard ISO 7840-A1 without metal shielding.

(g) Inspections for Gliders With An Affected Part Installed

Within the next 30 days after the effective date of this AD and thereafter at intervals not to exceed 12 months, visually inspect each affected part for fissures, kinks, and leaks. For this inspection, the ignition switch must be turned on to run the electric fuel pump to demonstrate an operating fuel pressure.

(1) If a fissure, kink, or leak is found on an affected part during any inspection required by the introductory language to paragraph (g) of this AD, before further flight: Replace all affected parts with unused (zero hours time-in-service (TIS)) serviceable parts by following paragraphs 3 and 4 of the Instructions in DG Flugzeugbau GmbH Technical Note No. 800/46, Issue 01.a, dated March 7, 2018 (TN No. 800/46), or paragraphs 3 through 5 of the Instructions in DG Technical Note No. 1000/38, Issue 01.a, dated February 15, 2018 (TN No. 1000/38), as applicable to your model glider.

(2) If no fissures, kinks, and leaks are found on all affected parts during any inspection required by the introductory language to paragraph (g) of this AD, before each affected part accumulates 6 years since first installation on a glider or within 6 months after the effective date of this AD, whichever occurs later: Replace all affected parts with

unused (zero hours TIS) serviceable parts by following paragraphs 3 and 4 of the Instructions in TN No. 800/46 or paragraphs 3 through 5 of the Instructions in TN No. 1000/38, as applicable to your model glider. If the date of first installation on a glider is unknown for any affected hose, replace all affected hoses within 6 months after the effective date of this AD.

(h) Inspections for Gliders With Only Serviceable Parts Installed

(1) Before or upon accumulating 6 years since first installation on a glider and thereafter at intervals not to exceed 12 months, visually inspect each serviceable part for fissures, kinks, and leaks. For this inspection, the ignition switch must be turned on to run the electric fuel pump to demonstrate an operating fuel pressure.

(2) If a fissure, a kink, or a leak is found during any inspection required by paragraph (h)(1) of this AD, before further flight, replace the part with an unused (zero hours TIS) serviceable part by following paragraphs 3 and 4 of the Instructions in TN No. 800/46 or paragraphs 3 through 5 of the Instructions in TN No. 1000/38, as applicable to your model glider.

(i) Life Limit

Before accumulating 10 years since first installation on a glider and thereafter at intervals not to exceed 10 years, remove each serviceable part from service and replace with an unused (zero hours TIS) serviceable part by following paragraphs 3 and 4 of the Instructions in TN No. 800/46 or paragraphs 3 through 5 of the Instructions in TN No. 1000/38, as applicable to your model glider.

(j) Parts Installation Prohibition

As of the effective date of this AD, do not install an affected part on any glider.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in Related Information or email: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

(1) For more information about this AD contact Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4165; fax: (816) 329-4090; email: jim.rutherford@faa.gov.

(2) Refer to European Aviation Safety Agency (EASA) AD 2018-0127, dated June 11, 2018, for more information. You may examine the EASA AD in the AD docket on the website at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0212.

(3) For service information identified in this AD, contact DG Flugzeugbau GmbH, Otto-Lilienthal Weg 2, D-76646 Bruchsal, Germany; phone: +49 (0)7251 3202-0; email: info@dg-flugzeugbau.de; website: https://www.dg-flugzeugbau.de/. You may review this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued on June 25, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
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